AMENDMENTS

IN THE CLAIMS:

There are no claim amendments to be made at this time. The claims are provided as a reference for the attached remarks.

1. (Previously Presented) A method for partial coalescing transmit buffers comprising:

obtaining a data packet from host software, wherein the data packet is located in an array of virtual buffers that each map to one or more physical buffers in a system memory;

analyzing the virtual buffers and the physical buffers associated with the data packet;

selectively copying either selected ones of the virtual buffers or selected ones of the physical buffers into a coalesced physical buffer based on the analysis; and

assembling a coalesced array from the coalesced physical buffer and one or more respective non-selected and non-coalesced virtual or physical buffers.

2-7. (Canceled).

8. (Previously Presented) The method of claim 1, wherein selectively copying selected ones of the one or more virtual or physical buffers comprises iteratively analyzing, in order, each virtual or physical buffer associated with the data packet such that the composite size of the selected ones is less than a predetermined size.

9. (Previously Presented) The method of claim 1, wherein selectively copying selected ones of the one or more virtual or physical buffers comprises performing the following beginning with a first buffer:

obtaining a size for a current virtual or physical buffer;

computing a composite size as a function of the current virtual or physical buffer size and a composite virtual or physical buffer length; and

on the composite virtual or physical buffer size being less than a predetermined size, selecting the current virtual or physical buffer and adding the current virtual or physical size to the composite virtual or physical buffer length.

10. (Previously Presented) The method of claim 1, further comprising determining a predetermined size according to a desired overall system performance, and using the predetermined size in identifying the selected ones of the virtual or physical buffers.

11. (Previously Presented) The method of claim 1, further comprising determining a predetermined size according to a desired network throughput, and using the predetermined size in identifying the selected ones of the virtual or physical buffers.

12. (Previously Presented) The method of claim 1, further comprising determining the predetermined size according to a desired overall system performance, network throughput, and system resource utilization, and using the predetermined size in identifying the selected ones of the virtual or physical buffers.

13. (Previously Presented) A method for partial coalescing transmit buffers comprising:

receiving an array of virtual buffers for a data packet;

mapping buffers of the array of virtual buffers to an array of physical buffers, wherein one or more of the physical buffers are associated with each of the virtual buffers;

analyzing the array of virtual buffers and the array of physical buffers for individual buffer sizes;

on the array of virtual buffers having a size greater than the array of associated physical buffers, selectively coalescing an initial number of buffers of the array of virtual buffers into a coalesced buffer; and

on the array of virtual buffers not having a size greater than the array of associated physical buffers, selectively coalescing an initial number of buffers of the array of physical buffers into the coalesced buffer.

14. (Original) The method of claim 13, further comprising forming a coalesced array from the coalesced buffer and non-coalesced buffers of the array of physical buffers.

15. (Original) The method of claim 14, further comprising passing the coalesced array to a network device for transmission.

16. (Original) The method of claim 13, wherein the initial number of selected buffers to coalesce depends on an initial fragment size.

17. (Original) The method of claim 13, wherein the coalesced buffer has a physical memory size and a physical address.

18. (Original) The method of claim 13, wherein the array of virtual buffers is received from host software.

19-21. (Canceled).

22. (Canceled).

23. (Previously Presented) The method of claim 25, wherein the determined number of virtual buffers comprises a number of virtual buffers that have a total size associated therewith that is less than a predetermined size.

24. (Previously Presented) The method of claim 25, wherein the determined number of physical buffers comprises a number of virtual buffers that have a total size associated therewith that is less than a predetermined size.

25. (Previously Presented) A method for partial coalescing transmit buffers comprising:

obtaining a data packet from host software, wherein the data packet is located in an array of virtual buffers that each map to one or more physical buffers in a system memory;

analyzing the virtual buffers and the physical buffers associated with the data packet;

selectively copying either selected ones of the virtual buffers or selected ones of the physical buffers into a coalesced physical buffer based on the analysis; and

wherein analyzing the virtual buffers and the physical buffers comprises:

coalescing a determined number of virtual buffers into the single physical coalesced buffer if the total size of the virtual buffers is greater than the total size of the physical buffers; and

coalescing a determined number of physical buffers into the single physical coalesced buffer if the total size of the virtual buffers is less than the total size of the physical buffers.

26. (Previously Presented) The method of claim 1, wherein assembling the coalesced array comprises assembling the coalesced physical buffer with one or more virtual buffers comprising header information and data or with one or more physical buffers comprising header information and data.

27. (Previously Presented) The method of claim 1, wherein the coalesced array comprises the entire coalesced physical buffer.